

AMENDMENTS TO THE CLAIMS

1. (currently amended) A configuration viewing system for use in a process plant having a processor and a user interface, the configuration viewing system comprising:

a computer readable memory;

a plurality of template configuration objects stored on the computer readable memory, wherein each of the plurality of template configuration objects includes a graphical representation of a physical entity within the process plant, a parameter storage adapted to communicate with the process plant to obtain and store device parameter information associated with the physical entity within the process plant and a configuration storage adapted to store configuration parameters associated with the physical entity within the process plant;

a first routine stored on the computer readable memory and adapted to be executed on the processor to present a library section on the user interface, the library section adapted to present depictions of the plurality of template configuration objects to a user via the user interface;

a second routine stored on the computer readable memory and adapted to be executed on the processor to present a configuration area on the user interface; and

a third routine stored on the computer readable memory and adapted to be executed on the processor to enable a user to select one of the plurality of template configuration objects from the library section and to place the selected template configuration object within the configuration area to create a process configuration module within the configuration area, the process configuration module associated with a portion of the process plant,

wherein the created process configuration module is an executable object including a particular displayable graphical representation associated with a particular physical entity within the process plant, a particularly configured parameter storage which, when executed, communicates with the particular physical entity within the process plant to obtain and store particular device parameter information associated with the particular physical entity within the process plant and a particularly configured configuration storage

which stores particular configuration parameters associated with the particular physical entity within the process plant.

2. (original) The configuration viewing system of claim 1, further including a fourth routine stored on the computer readable memory and adapted to be executed on the processor to execute the process configuration module to obtain device parameter information from the process plant pertaining to the physical entity associated with the process configuration module and to make the obtained device parameter information available to the user via the user interface.

3. (original) The configuration viewing system of claim 2, including an application communicatively coupled to the process configuration module which uses the device parameter information and the configuration parameters associated with the process configuration module to perform a data processing function with respect to the physical entity associated with the process configuration module.

4. (original) The configuration viewing system of claim 2, including an application communicatively coupled to the process configuration module which uses the configuration parameters associated with the process configuration module to perform a data processing function with respect to the physical entity associated with the process configuration module.

5. (original) The configuration viewing system of claim 2, including an application communicatively coupled to the process configuration module which uses the device parameter information associated with the process configuration module to perform a data processing function with respect to the physical entity associated with the process configuration module.

6. (original) The configuration viewing system of claim 5, wherein the application is a process control application.

7. (original) The configuration viewing system of claim 5, wherein the application is a control diagnostic application.

8. (original) The configuration viewing system of claim 5, wherein the application is a management application.

9. (original) The configuration viewing system of claim 5, wherein the application is a device diagnostic application.

10. (original) The configuration viewing system of claim 5, wherein the application is a control optimizer application.

11. (original) The configuration viewing system of claim 2, wherein the fourth routine is adapted to display the obtained device parameter information to the user via the user interface in conjunction with the graphical representation of the physical entity.

12. (original) The configuration viewing system of claim 2, wherein the configuration parameters include a display format for the device parameter information and wherein the fourth routine displays the device parameter information on the user interface according to the display format.

13. (original) The configuration viewing system of claim 12, wherein the display format is one of an operator display format and a maintenance display format.

14. (original) The configuration viewing system of claim 2, wherein the configuration parameters include multiple display formats for the device parameter information and wherein the fourth routine displays the device parameter information on the user interface according to a selected one of the multiple display formats.

15. (currently amended) The configuration viewing system of claim 1, wherein the third routine is adapted to enable a user to store the configuration parameters within the configuration storage of the selected template configuration object to create the process configuration module.

16. (original) The configuration viewing system of claim 15, wherein the third routine is adapted to enable a user to store data indicative of one or more physical attributes associated with the physical entity as the configuration parameters.

17. (original) The configuration viewing system of claim 16, wherein the one or more physical attributes includes at least one of a size, a flow capacity, a type, a volume, a surface area, a number of process input/output connections, a type of a process input/output connection, and a timing parameter.

18. (original) The configuration viewing system of claim 15, wherein the third routine is adapted to enable a user to store data indicative of a communication attribute associated with the physical entity.

19. (original) The configuration viewing system of claim 18, wherein the communication attribute includes at least one of a communication protocol, a communication connection type, a number of communication inputs/outputs, and a type of communication connection input/output.

20. (original) The configuration viewing system of claim 15, wherein the third routine is adapted to enable a user to store control information associated with control of the physical entity within the process plant.

21. (original) The configuration viewing system of claim 20, wherein the control information includes a control routine.

22. (original) The configuration viewing system of claim 20, wherein the control information includes an indication of a type of a control routine used to control the physical entity.

23. (original) The configuration viewing system of claim 20, wherein the control information includes a control diagnostic used to perform diagnostics with respect to controlling the physical entity.

24. (original) The configuration viewing system of claim 20, wherein the control information includes values for one or more control parameters associated with control of the physical entity.

25. (original) The configuration viewing system of claim 24, wherein the one or more control parameters includes at least one of a setpoint, an initial value, a default value, a range, a measurement unit, a limit, and a deadband.

26. (original) The configuration viewing system of claim 1, wherein at least one of the plurality of template configuration objects includes a simulation algorithm adapted to simulate operation of an entity within the process plant.

27. (original) The configuration viewing system of claim 1, wherein the configuration storage is adapted to store maintenance information associated with operation of the physical entity.

28. (original) The configuration viewing system of claim 27, wherein the maintenance information includes alarm configuration information.

29. (original) The configuration viewing system of claim 27, wherein the maintenance information includes device health configuration information.

30. (original) The configuration viewing system of claim 27, wherein the maintenance information includes maintenance diagnostics information.

31. (original) The configuration viewing system of claim 1, wherein the configuration storage is adapted to store process management information associated with managing the process in which the physical entity is located.

32. (original) The configuration viewing system of claim 31, wherein the process management information includes data related to at least one of a product type, a throughput, an efficiency, an uptime, a downtime, and a yield.

33. (original) The configuration viewing system of claim 1, wherein the plurality of template configuration objects includes one of a device object representative of a device within the process plant, a unit object representative of a unit within the process plant, an area object representative of an area of the process plant and a connection object representative of a connector element within the process plant.

34. (original) The configuration viewing system of claim 1, wherein the configuration parameters include an indication of one or more applications adapted to use the device parameter information to produce process information related to the physical entity and further including a fourth routine adapted to present the process information on the user interface.

35. (original) The configuration viewing system of claim 34, wherein the one or more applications includes a control diagnostics application.

36. (original) The configuration viewing system of claim 34, wherein the one or more applications includes a device diagnostics application.

37. (original) The configuration viewing system of claim 34, wherein the one or more applications includes a process management application.

38. (original) The configuration viewing system of claim 34, wherein the one or more applications includes an alarm application.

39. (currently amended) The configuration viewing system of claim 1, wherein the third routine is adapted to enable the user to create a plurality of interconnected process configuration modules in the configuration area, wherein each process configuration modules is associated with a different portion of the process plant, and further including a fourth routine adapted to execute the plurality of interconnected process configuration modules, including a first display routine adapted to display the graphic representations for a user-specified sub-portion of the plurality of interconnected process configuration modules on a user interface and a second display routine adapted to display process information associated with the process plant based on the user-specified sub-portion of the plurality of interconnected process configuration modules.

40. (original) The configuration viewing system of claim 39, wherein the second display routine displays the process information in a manner determined by the configuration parameters stored in the configuration storage of at least one of the process configuration modules within the user-specified sub-portion of the plurality of interconnected process configuration modules.

41. (original) The configuration viewing system of claim 40, furthering including an application that uses the process information of one or more of the process configuration modules within the user-specified sub-portion of the plurality of interconnected process configuration modules to produce the process information.

42. (currently amended) The configuration viewing system of claim 1, wherein [[in]] the third routine is adapted to enable the user to interconnect two or more of the template configuration objects within the configuration area to create the process configuration module.

43. (original) The configuration viewing system of claim 42, wherein the third routine is adapted to enable the user to interconnect the two or more of the template configuration objects to create a device process configuration module representative of a field device within the process plant.

44. (original) The configuration viewing system of claim 42, wherein the third routine is adapted to enable the user to interconnect the two or more of the template configuration objects to create a unit process configuration module representative of a unit within the process plant.

45. (original) The configuration viewing system of claim 42, wherein the third routine is adapted to enable the user to interconnect the two or more of the template configuration objects to create an area process configuration module representative of an area within the process plant.

46. (currently amended) A configuration entity adapted to be executed on a processor to present information with respect to a process element to a user on a user interface during operation of a process, the configuration entity comprising:

a computer readable memory; and

a configuration object stored on the computer readable memory and adapted to be executed on the processor, the configuration object including;

a display graphic representing the process element within the process and adapted to be displayed on the user interface during operation of the process;

a communication interface adapted to communicate with the process to receive parameter information pertaining to the process element during operation of the process;

a parameter storage adapted to store the parameter information; and

a configuration attribute storage adapted to store configuration information pertaining to the process element within the process;

wherein the configuration object is an executable object including a particular display graphic associated with a particular process element, a particularly configured communication interface adapted to communicate with the process plant to obtain and store particular parameter information associated with the particular process element within the process plant and a particularly configured configuration attribute storage that stores particular configuration parameters associated with the particular process element within the process plant.

47. (original) The configuration entity of claim 46, wherein the configuration object further includes a connection element specifying a connection to a further configuration object.

48. (original) The configuration entity of claim 46, wherein the configuration attribute storage is adapted to store data indicative of one or more physical attributes associated with the process element.

49. (original) The configuration entity of claim 48, wherein the one or more physical attributes includes at least one of a size, a flow capacity, a type, a volume, a surface area, a number of process input/output connections, a type of a process input/output connection, and a timing parameter.

50. (original) The configuration entity of claim 46, wherein the configuration attribute storage is adapted to store a communication attribute associated with the process element.

51. (original) The configuration entity of claim 50, wherein the communication attribute includes at least one of a communication protocol, a communication connection type, a number of communication inputs/outputs, and a type of communication connection input/output.

52. (original) The configuration entity of claim 46, wherein the configuration attribute storage is adapted to store control information associated with control of the process element within the process.

53. (original) The configuration entity of claim 52, wherein the control information includes a control routine.

54. (original) The configuration entity of claim 52, wherein the control information includes an indication of a type of a control routine used to control the process element.

55. (original) The configuration entity of claim 52, wherein the control information includes a control diagnostic used to perform diagnostics with respect to control of the process element.

56. (original) The configuration entity of claim 52, wherein the control information includes values for one or more control parameters associated with control of the process element.

57. (original) The configuration entity of claim 56, wherein the one or more control parameters includes at least one of a setpoint, an initial value, a default value, a range, a measurement unit, a limit, and a deadband.

58. (original) The configuration entity of claim 46, wherein the configuration object further includes a simulation algorithm adapted to simulate operation of the process element.

59. (original) The configuration entity of claim 46, wherein the configuration attribute storage is adapted to store maintenance information associated with operation of the process element.

60. (original) The configuration entity of claim 59, wherein the maintenance information includes alarm information.

61. (original) The configuration entity of claim 59, wherein the maintenance information includes device health information.

62. (original) The configuration entity of claim 59, wherein the maintenance information includes device calibration information.

63. (original) The configuration entity of claim 59, wherein the maintenance information includes maintenance diagnostics information.

64. (original) The configuration entity of claim 46, wherein the configuration attribute storage is adapted to store process management information associated with managing the process in which the process element is located.

65. (original) The configuration entity of claim 64, wherein the process management information includes data related to a product type.

66. (original) The configuration entity of claim 64, wherein the process management information includes data related to a throughput.

67. (original) The configuration entity of claim 64, wherein the process management information includes data related to an efficiency.

68. (original) The configuration entity of claim 64, wherein the process management information includes data related to an uptime or a downtime.

69. (original) The configuration entity of claim 64, wherein the process management information includes data related to a yield.

70. (original) The configuration entity of claim 46, further including a display routine adapted to display on the user interface the parameter information related to the process element in a manner determined by the configuration information.

71. (original) The configuration entity of claim 46, wherein the configuration attribute storage is adapted to store a reference to a further application that is configured to process the parameter information to produce additional process information.

72. (original) The configuration entity of claim 71, wherein the further application is a process optimizer application.

73. (original) The configuration entity of claim 71, wherein the further application is an equipment monitoring application.

74. (original) The configuration entity of claim 71, wherein the further application is a process control application.

75. (original) The configuration entity of claim 71, wherein the further application is a process management application.

76. (original) The configuration entity of claim 71, further including a display routine adapted to display the additional process information on the user interface in conjunction with the display graphic.

77. (original) The configuration entity of claim 76, wherein the further application is a process control application.

78. (original) The configuration entity of claim 76, wherein the further application is an equipment monitoring application.

79. (original) The configuration entity of claim 76, wherein the further application is an equipment maintenance application.

80. (original) The configuration entity of claim 76, wherein the further application is a process management application.

81. (original) The configuration entity of claim 76, wherein the further application is a diagnostic application.

82. (original) The configuration entity of claim 46, further including a display routine adapted to display the parameter information on the user interface in conjunction with the display graphic.

83. (original) The configuration entity of claim 82, wherein the display routine is adapted to display the parameter information in the form of a graph.

84. (original) The configuration entity of claim 82, wherein the display routine is adapted to display the parameter information in the form of text.

85. (currently amended) An integrated configuration system for use in a process plant, the integrated configuration system comprising:

one or more workstations each having a processor, a memory, and a display device;

a configuration application stored in the memory and adapted to be executed on one of the processors to create a process configuration module using one or more configuration objects, wherein the process configuration module is communicatively coupled to an entity associated with the process plant, and wherein each of the configuration objects includes a graphical representation of a physical entity within the process plant, a parameter storage adapted to store device parameter information associated with the physical entity within the process plant and a configuration storage adapted to store configuration parameters associated with the physical entity within the process plant;

a plurality of data source applications stored in the memory and adapted to be executed on one of the processors to collect or generate application data pertaining to the associated process entity; and

a user interface application stored in the memory and adapted to be executed on the processor to display a graphical view via the display device using the process configuration module and the application data;

wherein the process configuration module is an executable object including a particular graphical representation associated with a particular physical entity, a particularly configured parameter storage adapted to communicate with the process plant to obtain and store particular device parameter information associated with the particular physical entity within the process plant and a particularly configured configuration storage that stores particular configuration parameters associated with the particular physical entity within the process plant.

86. (original) The integrated configuration system of claim 85, wherein the process configuration module includes an attribute that defines an operating characteristic associated with the process configuration module.

87. (original) The integrated configuration system of claim 86, wherein the attribute includes an identification of one or more of the plurality of the data source applications communicatively coupled to the process configuration module.

88. (original) The integrated configuration system of claim 86, wherein the attribute includes at least one of an engineering attribute, a control attribute, a maintenance attribute, and a management attribute.

89. (original) The integrated configuration system of claim 85, wherein the graphical view includes at least one of an engineering view, an operator view, a maintenance view, and a management view.

90. (original) The integrated configuration system of claim 85, wherein the associated process entity includes one of a process area, a process unit, power equipment, rotating equipment, a field device, a connection device, and a control loop.

91. (original) The integrated configuration system of claim 85, wherein each of the configuration objects further includes a tag to perform communications.

92. (original) The integrated configuration system of claim 85, wherein each of the configuration objects further includes one or more inputs and outputs and a method adapted to perform a function related to process operation using the device parameter information.

93. (original) The integrated configuration system of claim 92, wherein the device parameter information includes at least one of parameter data, status data, input data, output data, and cost data.

94. (original) The integrated configuration system of claim 85, further including an object library stored on the memory, wherein the object library is adapted to store a plurality of predefined configuration objects that may be accessed by the configuration application to create the process configuration module.

95. (original) The integrated configuration system of claim 94, wherein the plurality of predefined configuration objects includes at least one of an area object, a unit object, a device object, a connection object, and a control loop object.

96. (original) The integrated configuration system of claim 94, wherein the configuration application is adapted to enable a user to create at least one custom configuration object using the plurality of predefined configuration objects, and to store the at least one custom configuration object in the object library.

97. (original) The integrated configuration system of claim 85, further including an execution engine stored in the memory and adapted to be executed on the processor that executes the process configuration module during operation of the process plant to perform a function related to process operation.

98. (original) The integrated configuration system of claim 85, wherein the plurality of data source applications includes at least one of a maintenance system application, an optimizer application, a predictive control application, an equipment monitoring application, and a business application.

99. (original) The integrated configuration system of claim 85, wherein the configuration application is located remotely from the plurality of data source

applications, and is adapted to communicate with the plurality of data source applications via a communication link.

100. (original) The integrated configuration system of claim 99, wherein the communication link comprises the Internet.

101. (currently amended) An integrated configuration system for modeling a layout of a process plant, the integrated configuration system comprising:

a computer readable memory;

a configuration routine stored on the computer readable memory and adapted to be executed on a processor, wherein the configuration routine creates a process configuration module for an entity associated with the process plant using one or more configuration objects, wherein each configuration object is an executable object including a particular graphical representation associated with a particular sub-entity associated with the entity, a particularly configured parameter storage adapted to communicate with the process plant to obtain and store particular device parameter information associated with the particular sub-entity associated with the entity and a particularly configured configuration storage that stores particular configuration parameters associated with the particular sub-entity associated with the entity, and wherein the process configuration module is communicatively coupled to ~~an~~ the entity associated with the process plant;

an application routine stored on the computer readable memory and adapted to be executed on the processor, wherein the application routine collects or generates application data pertaining to the entity associated with the process plant; and

a user interface routine stored on the computer readable memory and adapted to be executed on the processor, wherein the user interface routine generates a graphical view of the process plant via a display device based on the process configuration module and the application data.

102. (original) The integrated configuration system of claim 101, wherein the configuration routine enables a user to specify an attribute associated with the process configuration module.

103. (original) The integrated configuration system of claim 102, wherein the attribute includes an identification of one or more data source applications communicatively coupled to the process configuration module to access data associated with the process configuration module.

104. (original) The integrated configuration system of claim 102, wherein the attribute includes at least one of an engineering attribute, a control attribute, a maintenance attribute, and a management attribute.

105. (original) The integrated configuration system of claim 101, wherein the graphical view includes at least one of an engineering view, an operating view, a maintenance view, and a management view.

106. (currently amended) The integrated configuration system of claim 101, wherein each of the configuration objects includes a data storage adapted to store object data pertaining to the associated process sub-entity, a graphic representation depicting the associated process sub-entity, one or more inputs and outputs, and a method adapted to perform a function related to process operation using the application data.

107. (currently amended) A method for integrating the viewing and configuration activities of multiple applications within a process plant, the method comprising:

creating a process configuration module by interconnecting one or more configuration objects, wherein each of the configuration objects is an executable object including a particular graphical representation associated with a particular physical entity within the process plant, a particular parameter storage adapted to communicate with the process plant to obtain and store particular device parameter information associated with the particular physical entity within the process plant and a particular configuration storage adapted to store particular configuration parameters associated with the particular physical entity within the process plant, wherein the process configuration module is

communicatively coupled to an entity associated with the process plant that includes each of the particular physical entities associated with each of the one or more configuration objects;

collecting or generating application data pertaining to the associated process entity;
and

generating a graphical view based on the process configuration module and the application data.

108. (original) The method of claim 107, further including specifying an attribute associated with the process configuration module.

109. (original) The method of claim 108, wherein specifying the attribute associated with the process configuration module includes identifying one or more data source applications that are communicatively coupled to the process configuration module to access the application data associated with the process configuration module.

110. (original) The method of claim 108, wherein specifying the attribute associated with the process configuration module includes specifying at least one of an engineering attribute, a control attribute, a maintenance attribute, and a management attribute.

111. (original) The method of claim 107, further including storing a plurality of predefined configuration objects in an object library.

112. (original) The method of claim 111, further including creating at least one custom configuration object using the plurality of predefined configuration objects, and storing the at least one custom configuration object in the object library.

113. (original) The method of claim 111, wherein creating the process configuration module includes providing a configuration section on a display device, selecting a depiction of one of the plurality of predefined configuration objects from the object library, dragging the selected depiction of one of the plurality of predefined configuration objects to the configuration section and dropping the selected depiction of one of the plurality of predefined configuration objects in a desired location on the configuration section.

114. (original) The method of claim 107, further including executing the process configuration module to perform a function related to process operation.

115. (currently amended) A method of configuring and viewing the operation of a process, comprising:

storing a set of generic template configuration objects in a computer readable memory wherein each of the generic template configuration objects includes a display graphic representing one or more physical elements within the process;

enabling a user to create a process configuration module from one or more of the stored generic template configuration objects, wherein the created process configuration module is associated with a particular entity within the process, and is an executable object including a particular graphical representation associated with a particular entity, a particular parameter storage adapted to communicate with devices within the process to obtain and store device parameter information associated with the particular entity within the process and a particular configuration storage adapted to store configuration parameter information associated with the particular entity within the process;

enabling the user to provide configuration parameters parameter information for the process configuration module indicative of a configuration of the particular entity within the process;

executing the process configuration module during operation of the process to communicate with the process to receive device parameter information pertaining to the particular entity within the process;

storing the received device parameter information and the configuration parameter information; and

displaying the display graphic representing one or more physical elements associated with the process configuration module to the user via a user interface.

116. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein executing the process configuration module includes displaying the configuration parameter information or the device parameter information to the user via the user interface in conjunction with at least one display graphic representing at least one of the physical elements.

117. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein enabling the user to provide configuration ~~parameters~~ parameter information for the process configuration module includes enabling the user to specify one or more engineering parameters associated with the process configuration module.

118. (original) The method of configuring and viewing the operation of a process of claim 117, wherein enabling the user to specify one or more engineering parameters associated with the process configuration module includes enabling the user to specify at least one of a size, a flow capacity, a type, a volume, a surface area, a number of process input/output connections, a type of a process input/output connection, and a timing parameter.

119. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein enabling the user to provide configuration ~~parameters~~ parameter information for the process configuration module includes enabling the user to specify one or more control parameters associated with control of the particular entity with which the process configuration module is associated.

120. (original) The method of configuring and viewing the operation of a process of claim 119, wherein enabling the user to specify one or more control parameters includes enabling the user to specify a specific control routine used within a controller of the process.

121. (original) The method of configuring and viewing the operation of a process of claim 119, wherein enabling the user to specify one or more control parameters includes enabling the user to specify a type of a control routine used to control the particular entity with which the process configuration module is associated.

122. (original) The method of configuring and viewing the operation of a process of claim 119, wherein enabling the user to specify one or more control parameters includes enabling the user to specify a control diagnostic used to perform diagnostics with respect to the control of the particular entity with which the process configuration module is associated.

123. (original) The method of configuring and viewing the operation of a process of claim 119, wherein enabling the user to specify one or more control parameters includes enabling the user to specify one or more control parameter values associated with the control of the particular entity with which the process configuration module is associated.

124. (original) The method of configuring and viewing the operation of a process of claim 123, wherein enabling the user to specify one or more control parameter values includes enabling the user to specify a particular value for at least one of a setpoint, an initial value, a default value, a range, a measurement unit, a limit, and a deadband.

125. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein enabling the user to provide configuration parameters parameter information for the process configuration module includes enabling the user to

specify one or more communication attributes associated with the particular entity with which the process configuration module is associated.

126. (original) The method of configuring and viewing the operation of a process of claim 125, wherein enabling the user to specify one or more communication attributes includes enabling the user to specify at least one of a communication protocol, a communication connection type, a number of communication inputs/outputs, and a type of communication connection input/output.

127. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein enabling the user to provide configuration ~~parameters~~ parameter information for the process configuration module includes enabling the user to specify a simulation algorithm adapted to simulate operation of the particular entity with which the process configuration module is associated.

128. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein enabling the user to provide configuration ~~parameters~~ parameter information for the process configuration module includes enabling the user to specify one or more maintenance attributes associated with the particular entity with which the process configuration module is associated.

129. (original) The method of configuring and viewing the operation of a process of claim 128, wherein enabling the user to specify one or more maintenance attributes includes enabling the user to specify alarming information.

130. (original) The method of configuring and viewing the operation of a process of claim 128, wherein enabling the user to specify one or more maintenance attributes includes enabling the user to specify device health information.

131. (original) The method of configuring and viewing the operation of a process of claim 128, wherein enabling the user to specify one or more maintenance attributes includes enabling the user to specify maintenance diagnostics information.

132. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein enabling the user to provide configuration ~~parameters~~ parameter information for the process configuration module includes enabling the user to specify management information associated with managing the process in which the particular entity is located.

133. (original) The method of configuring and viewing the operation of a process of claim 132, wherein enabling the user to specify management information includes enabling the user to specify at least one of a product type, a throughput, an efficiency, an uptime, a downtime and a yield.

134. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein enabling a user to create a process configuration module from one or more of the stored template configuration objects includes presenting the one or more ~~generic~~ template configuration objects to the user via the user interface, enabling the user to select the one or more ~~generic~~ template configuration objects and enabling the user to interconnect the selected one or more ~~generic~~ template configuration objects to create the process configuration module.

135. (currently amended) The method of configuring and viewing the operation of a process of claim 134, wherein enabling the user to create the process configuration module includes enabling the user to specify particular process entities associated with each of the one or more ~~generic~~ template configuration objects.

136. (original) The method of configuring and viewing the operation of a process of claim 135, wherein enabling the user to specify particular process entities includes enabling the user to specify a tag associated with each of the particular process

entities to be stored in the process configuration module to identify the particular process entities associated with the process configuration module.

137. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein enabling the user to provide configuration ~~parameters~~ parameter information for the process configuration module includes enabling the user to specify a further application to be executed using the configuration parameter information to produce additional process information and wherein executing the process configuration module during the operation of the process includes communicating the configuration parameter information to the further application.

138. (original) The method of configuring and viewing the operation of a process of claim 137, wherein the further application is an optimizer application.

139. (original) The method of configuring and viewing the operation of a process of claim 137, wherein the further application is a control application.

140. (original) The method of configuring and viewing the operation of a process of claim 137, further including displaying the additional process information on the user interface in conjunction with the display graphic representing one or more physical elements associated with the process configuration module.

141. (original) The method of configuring and viewing the operation of a process of claim 137, wherein the further application is a control diagnostics application.

142. (currently amended) The method of configuring and viewing the operation of a process of claim 115, wherein enabling the user to create the process configuration module from one or more of the stored ~~generic~~ template configuration objects includes enabling the user to create a plurality of process configuration modules from the one or more of the stored ~~generic~~ template configuration objects, wherein each of the plurality of

process configuration modules is associated with a different portion of the process plant, and further including enabling the user to view different ones of the plurality of process configuration modules on the user interface at different times during execution of the plurality of process configuration modules.

143. (original) The method of configuring and viewing the operation of the process of claim 142, wherein enabling the user to view different ones of the plurality of process configuration modules on the user interface at different times includes enabling the user to select a subset of the plurality of process configuration modules to view on the user interface at the same time.

144. (original) The method of configuring and viewing the operation of the process of claim 143, further including displaying information pertaining to the process on the user interface in conjunction with the subset of the plurality of process configuration modules being displayed on the user interface.

145. (original) The method of configuring and viewing the operation of the process of claim 144, wherein displaying information pertaining to the process on the user interface in conjunction with the subset of the plurality of process configuration modules being displayed on the user interface includes displaying information pertaining to the subset of the plurality of process configuration modules on the user interface.

146. (original) The method of configuring and viewing the operation of the process of claim 144, wherein displaying information pertaining to the process on the user interface in conjunction with the subset of the plurality of process configuration modules being displayed on the user interface includes filtering the information to be displayed on the user interface based on the subset of the plurality of process configuration modules being displayed on the user interface.

147. (original) The method of configuring and viewing the operation of the process of claim 146, wherein displaying information pertaining to the process includes

displaying alarm information pertaining to the subset of the plurality of process configuration modules being displayed on the user interface.

148. (original) The method of configuring and viewing the operation of the process of claim 146, wherein displaying information pertaining to the process includes displaying device maintenance information pertaining to the subset of the plurality of process configuration modules being displayed on the user interface.

149. (original) The method of configuring and viewing the operation of the process of claim 146, wherein displaying information pertaining to the process includes displaying control information pertaining to the subset of the plurality of process configuration modules being displayed on the user interface.

150. (original) The method of configuring and viewing the operation of the process of claim 146, wherein displaying information pertaining to the process includes displaying business information pertaining to the subset of the plurality of process configuration modules being displayed on the user interface.

151. (original) The method of configuring and viewing the operation of the process of claim 146, further including configuring an additional application to communicate with the process configuration module to obtain information from the process configuration module.

152. (original) The method of configuring and viewing the operation of the process of claim 151, wherein configuring the additional application to communicate with the process configuration module includes configuring the additional application to obtain engineering information from the process configuration module.

153. (original) The method of configuring and viewing the operation of the process of claim 151, wherein configuring the additional application to communicate with

the process configuration module includes configuring the additional application to obtain process control information from the process configuration module.

154. (currently amended) The method of configuring and viewing the operation of the process of claim 151, wherein configuring the additional application to communicate with the process configuration module includes configuring the additional application to obtain the device parameter information or the configuration parameter information sent to the process configuration module by the process.

155. (currently amended) The method of configuring and viewing the operation of the process of claim 151, wherein configuring the additional application to communicate with the process configuration module includes configuring the additional application to obtain the configuration ~~parameters~~ parameter information from the process configuration module.

156. (new) The configuration viewing system of claim 1, wherein the created process configuration module is adapted to provide, to a plurality of applications, the particular displayable graphical representation or the particular device parameter information or the particular configuration parameters.

157. (new) The configuration entity of claim 46, wherein the created process configuration module is adapted to provide, to a plurality of applications, the particular display graphic or the particular parameter information or the particular configuration parameters.

158. (new) The integrated configuration system of claim 85, wherein the created process configuration module is adapted to provide, to a plurality of applications, the particular graphical representation or the particular device parameter information or the particular configuration parameters.

159. (new) The integrated configuration system of claim 101, wherein the created process configuration module is adapted to provide, to a plurality of applications, the particular graphical representation or the particular device parameter information or the particular configuration parameters.

160. (new) The method of claim 107, wherein the created process configuration module is adapted to provide, to a plurality of applications, the particular graphical representation or the particular device parameter information or the particular configuration parameters.

161. (new) The method of configuring and viewing the operation of a process of claim 115, wherein the created process configuration module is adapted to provide, to a plurality of applications, the particular graphical representation or the particular device parameter information or the particular configuration parameters.